

WHAT IS CLAIMED IS:

1. A method for identifying an available peripheral component interconnect (PCI) slot in a computing device, comprising:

5 identifying at least one PCI slot in the computing device;

identifying any PCI devices coupled to a PCI bus, the PCI bus coupled to the PCI slot; and

determining if any of the identified PCI slots are  
10 available without requiring physical inspection of the PCI slots, an available PCI slot comprising an identified PCI slot that is not coupled to an identified PCI device.

2. The method of Claim 1, wherein identifying at least  
15 one PCI slot in the computing device comprises identifying a bus number and a device number for at least one PCI slot using a PCI Interrupt Request (IRQ) routing table.

3. The method of Claim 2, further comprising locating  
20 the routing table in a read-only memory in the computing device.

4. The method of Claim 1, wherein identifying any PCI devices coupled to a PCI bus comprises identifying a bus

number and a device number for each PCI device coupled to the PCI bus.

5        5.     The method of Claim 1, wherein determining if any of  
the identified PCI slots are available comprises comparing a  
bus number and a device number of at least one of the  
identified PCI slots to a bus number and a device number of at  
least one of the identified PCI devices.

10       6.     The method of Claim 1, further comprising  
determining how many identified PCI slots are available.

7. A system for identifying an available peripheral component interconnect (PCI) slot in a computing device, comprising:

at least one computer readable medium; and

5 software encoded on the at least one computer readable medium and operable when executed by a processor to:

identify at least one PCI slot in the computing device;

10 identify any PCI devices coupled to a PCI bus, the PCI bus coupled to the PCI slot; and

determine if any of the identified PCI slots are available without requiring physical inspection of the PCI slots, an available PCI slot comprising an identified PCI slot that is not coupled to an identified PCI device.

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8. The system of Claim 7, wherein the software is operable to identify at least one PCI slot in the computing device by identifying a bus number and a device number for at least one PCI slot using a PCI Interrupt Request (IRQ) routing  
20 table.

9. The system of Claim 8, wherein the software is further operable to locate the routing table in a read-only memory in the computing device.

10. The system of Claim 7, wherein the software is operable to identify any PCI devices coupled to a PCI bus by identifying a bus number and a device number for each PCI  
5 device coupled to the PCI bus.

11. The system of Claim 7, wherein the software is operable to determine if any of the identified PCI slots are available by comparing a bus number and a device number of at  
10 least one of the identified PCI slots to a bus number and a device number of at least one of the identified PCI devices.

12. The system of Claim 7, wherein the software is further operable to determine how many identified PCI slots  
15 are available.

13. A system for identifying an available peripheral component interconnect (PCI) slot in a computing device, comprising:

a memory operable to store information identifying at least one PCI slot in the computing device; and

a processor coupled to the memory and operable to:

identify any PCI devices coupled to a PCI bus, the PCI bus coupled to the PCI slot; and

determine if any of the identified PCI slots are available without requiring physical inspection of the PCI slots, an available PCI slot comprising an identified PCI slot that is not coupled to an identified PCI device.

14. The system of Claim 13, wherein the processor is operable to generate the information identifying at least one PCI slot in the computing device by identifying a bus number and a device number for at least one PCI slot using a PCI Interrupt Request (IRQ) routing table.

15. The system of Claim 14, wherein the processor is further operable to locate the routing table in a read-only memory in the computing device.

16. The system of Claim 13, wherein the processor is operable to identify any PCI devices coupled to a PCI bus by identifying a bus number and a device number for each PCI device coupled to the PCI bus using a bus controller.

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17. The system of Claim 13, wherein the processor is operable to determine if any of the identified PCI slots are available by comparing a bus number and a device number of at least one of the identified PCI slots to a bus number and a  
10 device number of at least one of the identified PCI devices.

18. The system of Claim 13, wherein the processor is further operable to determine how many identified PCI slots are available.

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19. A method for identifying an available peripheral component interconnect (PCI) slot in a computing device, comprising:

locating a PCI Interrupt Request (IRQ) routing table;

5 identifying a bus number and a device number for at least one PCI slot using the routing table;

identifying a bus number and a device number for any PCI devices coupled to a PCI bus, the PCI bus coupled to the PCI slot;

10 comparing the bus number and the device number of at least one of the identified PCI slots to the bus number and the device number of at least one of the identified PCI devices; and

determining if any of the identified PCI slots are  
15 available. based on the comparison, an available PCI slot comprising an identified PCI slot that is not coupled to an identified PCI device.

20. A system for identifying an available peripheral component interconnect (PCI) slot in a computing device, comprising:

at least one computer readable medium; and

5 software encoded on the at least one computer readable medium and operable when executed by a processor to:

locate a PCI Interrupt Request (IRQ) routing table;

identify a bus number and a device number for at least one PCI slot using the routing table;

10 identify a bus number and a device number for any PCI devices coupled to a PCI bus, the PCI bus coupled to the PCI slot;

compare the bus number and the device number of at least one of the identified PCI slots to the bus number and  
15 the device number of at least one of the identified PCI devices; and

determine if any of the identified PCI slots are available based on the comparison, an available PCI slot comprising an identified PCI slot that is not coupled to an  
20 identified PCI device.



21. A system for identifying an available peripheral component interconnect (PCI) slot in a computing device, comprising:

a memory containing a PCI Interrupt Request (IRQ) routing  
5 table; and

a processor coupled to the memory and operable to:

locate the routing table in the memory;

identify a bus number and a device number for at  
least one PCI slot using the routing table;

10 identify a bus number and a device number for any  
PCI devices coupled to a PCI bus, the PCI bus coupled to the  
PCI slot;

compare the bus number and the device number of at  
least one of the identified PCI slots to the bus number and  
15 the device number of at least one of the identified PCI  
devices; and

determine if any of the identified PCI slots are  
available based on the comparison, an available PCI slot  
comprising an identified PCI slot that is not coupled to an  
20 identified PCI device.

*Add #17*